

What is claimed is:

1. A system for controlling an adaptive equalizer, the system comprising:
  - 5 a DC estimator for estimating a DC value included in a received baseband signal;
  - a maximum outputting unit for extracting a maximum DC value from the estimated DC value from the DC estimator;
  - a minimum outputting unit for extracting a minimum DC value from the estimated DC value from the DC estimator;
  - 10 a initializing circuit for initializing the maximum outputting unit and the minimum outputting unit to a new DC value applied at every a predetermined number of field periods;
  - operating means coupled to the maximum outputting unit and the minimum outputting unit for obtaining a difference between the maximum DC value and the minimum DC value;
  - 15 a computing unit coupled to the maximum outputting unit and the minimum outputting unit for obtaining a median value between the maximum DC value and the minimum DC value;
  - storing means for storing thresholds for the DC value and outputting one of the thresholds corresponding to the median value from the computing unit;
  - 20 a comparator for comparing the difference between the maximum DC value and the minimum DC value from the operating means with the one of the thresholds outputted from the storing means; and
  - a controllor for changing an operation mode of the adaptive equalizer to a blind mode when the difference between the maximum DC value and the minimum DC value is larger
  - 25 than the one of the thresholds in response to a comparison result from the comparator and changing the operation mode of the adaptive equalizer to a training mode when a count

number is larger than a predetermined number after a counting operation operated in response to a segment synchronization signal when the difference between the maximum DC value and the minimum DC value is smaller than the one of the thresholds.

5           2. The system as recited in claim 1, wherein the initializing circuit initializes the maximum outputting unit and the minimum outputting unit at every 512 field synchronizations.

10           3. The system as recited in claim 1, wherein the controller initializes the count number when the difference between the maximum DC value and the minimum DC value is larger than the one of the thresholds during the counting operation.

15           4. The system as recited in claim 2, wherein the controller initializes the count number when the difference between the maximum DC value and the minimum DC value is larger than the one of the thresholds during the counting operation.

5. A method for controlling operation modes of an adaptive equalizer, a method comprising:

estimating a DC value from a received baseband signal;

obtaining a maximum DC value and a minimum DC value from the estimated DC

5 value;

comparing a difference between the maximum DC value and the minimum DC value with a threshold responsive to the estimated DC value;

changing an operation mode of the adaptive equalizer to a blind mode if the difference between the maximum DC value and the minimum DC value is larger than the threshold;

10 counting a count number in response to a segment synchronization signal if the difference between the maximum DC value and the minimum DC value is smaller than the threshold;

comparing the count number with a predetermined number; and

15 changing the operation mode of the adaptive equalizer to a training mode if the count number is larger than the predetermined number after repeating counting if the difference between the maximum DC value and the minimum DC value is smaller than the threshold.

6. The method as recited in claim 5, wherein the threshold is established based on a median value of the maximum DC value and the minimum DC value.

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